

# HTX99R Series

## Humidity & Temperature Transmitters for Chamber Applications for High temp & High humidity Applications

### FEATURES

- Remote probe type
  - Probe length (65, 220, 330mm)
  - Cable length 2m (max 10m)
- High density stainless steel mesh filter
- Easy field calibration
- Wide temperature range (-50...190°C), Max. 200°C (Short term)
- RS485 Network function (Modbus RTU/ASCII)
- Free support Monitoring S/W (DynaviewHTX)
- 4~20mA output (RH, T)
- FND Display & Set switch

### APPLICATIONS

- High humidity & Temp Measurement
- Chamber
- Dry process



( MF500 FLANGE )

HUMITRON® HTX99R series is a suitable model for test chamber or fiber drying process which uses high temperature and humidity.

The humidity element developed for high temperature and humidity can realize regular precision at wide range through temperature compensation.

It transmits the data in real time at control and system through RS485 communication function, and it can do precise control, efficient monitoring.

Plug-in terminal block is applied for easy wiring and service and it is possible to use the input power either 15~24Vdc or 12~24Vac



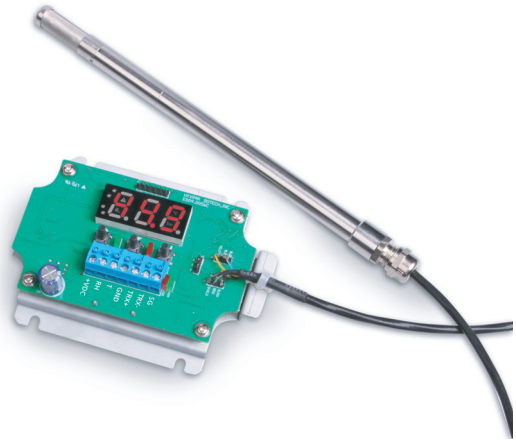
### SPECIFICATIONS

Item	Model	HTX99R
Humidity	Measure range	0...100% RH
	Accuracy	including hysteresis, non-linearity and repeatability, traceable to intern. order spec. : $\pm 1.0\%RH$ (0...90%RH) $\pm 2.0\%RH$ (90...100%RH) standard : $\pm 2.0\%RH$ (0...90%RH) $\pm 3.0\%RH$ (90...100%RH)
	Response	with filter at 20° C < 15 sec.
	Output	4...20mA (3-wire)
Temperature	Measure range	-50...200°C (user can be set)
	Accuracy at 25°C	$\pm 0.2$ ° C
	Repeatability	$\pm 0.1$ ° C
	Response	Max. 30 sec.
	Output	4..20mA (3-wire)
Function	sensor fault, RS485 Network, 1,2,3 point calibration	
Power supply	15...24Vdc or 12...24Vac	
Dimension(W×H×Dmm)	120×80×60, without cable grand & probe	
Network(BPS,Protocol)	4800,9600,19200 BPS / MODBUS-RTU(ASCII)	
Cable grand	PG9 (black, 3~6.5mm)	
Wiring	pluggable screw terminals up to max. 1.5mm <sup>2</sup> (AWG 16)	
Protection Filter	stainless steel mesh filter	
Storage & Operation cond.	-40 ~ 60°C (Electric part)	
Housing	Ploy carbonate (IP65)	
Weight	60 g	

## Product image

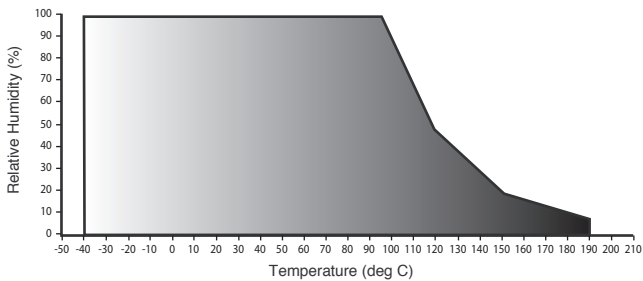


( HTX99R )

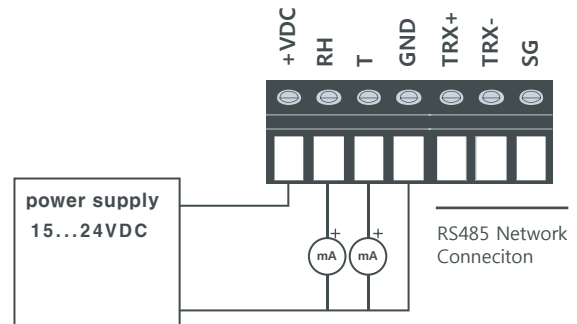


( HTX99R-OEM )

## Working Range



## Connection Diagram

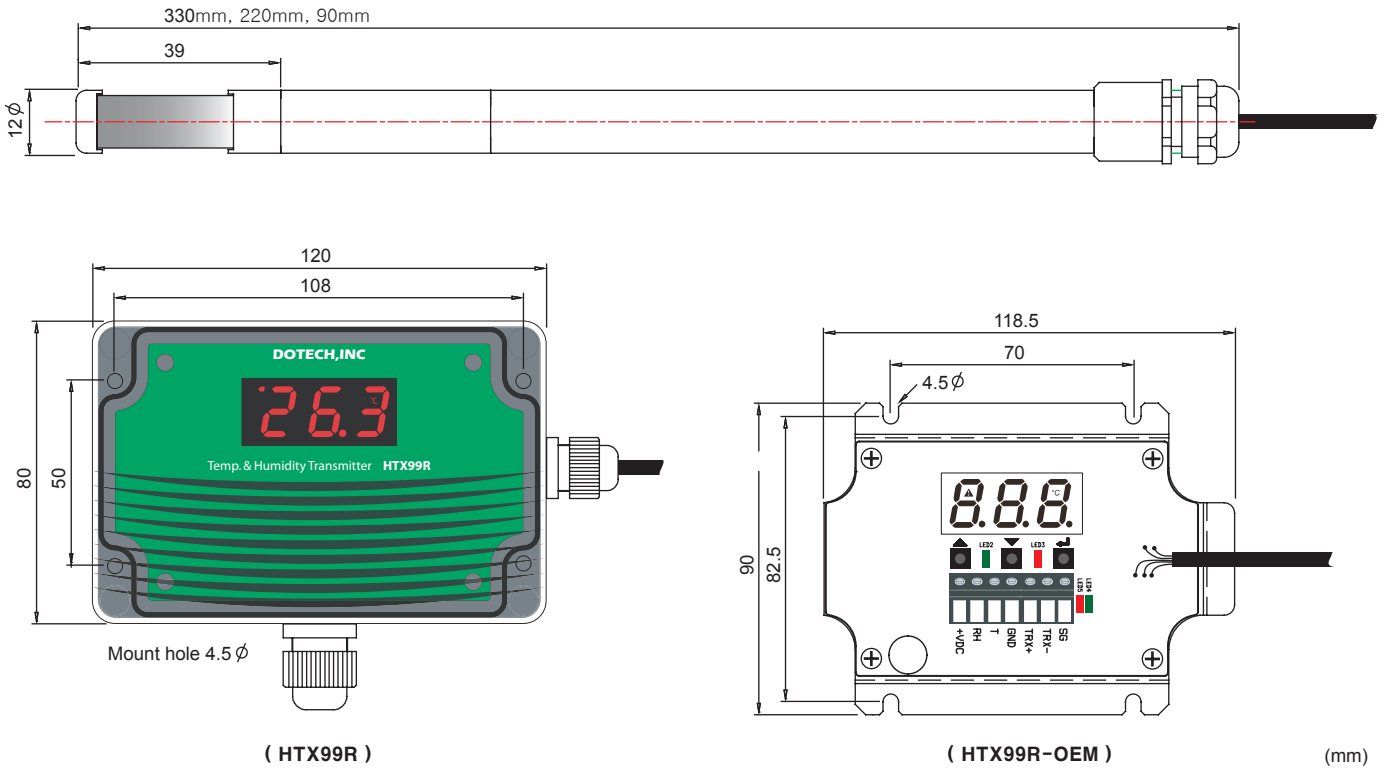


## Ordering Guide

Series	Model	Cable length	Probe length	Calibration	Description
HTX99R					HUMITRON HTX Series Transmitters
HTX99R-OEM					HUMITRON HTX Series Transmitters OEM Model
	FTC				Humidity +Temperature 4~20mA
		2m			Cable length : 2m
		5m			Cable length : 5m
		10m			Cable length : 10m
			L		330mm
			M		220mm
			S		90mm
HTX99R-FTC-2m-M :					
Humidity(4~20mA),					
Temperature(4~20mA),					
Remote Probe 220mm, Remote Cable 2m				-	Standard
				CA1	±1.0%rh Humidity Calibration

# HTX99R Series

## OUTLINE DIMENSION



( HTX99R )

( HTX99R-OEM )

(mm)

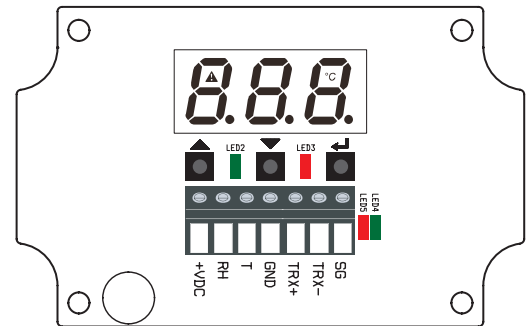
## Pre-caution for use

- This product may cause an electric shock in handling. Please do not attempt to open it with power turned on.
  - This product should be installed in a place fixed secured by a rack or panel.
  - This product can be used under the following environmental condition
    - ① Indoor ② Pollution Degree 2 ③ At an altitude of 2000m or below ④ Installation Category II
  - To turn on or turn off power supply for this product, please the circuit breaker or switch of a standard product of IEC 60947-1 or IEC 60947-3 product and install it within a close distance allowing convenient operation by user.
  - Please be understood that if this product is dismantled or modified discretionary, after sales service will not be able to be provided.
  - An output wire to be used for this product should be inflammable grade FV1 (V-1 grade or above), the thickness of the wire should be AWG No. 20 or above, (0.50mm)
  - In order to prevent it from an inductive noise, please maintain the high-voltage wire and power wire separated.
  - Please avoid installing the product in a place where a strong magnetism, noise, severe vibration and impact exist.
  - When extending the sensor wire, use a shield wire and do not extend it unnecessary long.
  - The sensor wire and signal wire should be away from the power and load wires using conduits separately installed.
  - Please avoid using the product near a device generating strong high frequency noise (high-frequency welding machine, high-frequency sewing machine, high-frequency radiotelegraph, high capacity SCR controller)
  - PRODUCT'S DAMAGES OTHER THAN THOSE DESCRIBED IN THE GUARANTEE CONDITIONS PROVIDED BY THE MANUFACTURER SHALL NOT BE RESPONSIBLE BY US.
- ※ The Aforementioned precautions must be observed, and if you fail to do so, it may cause a product's breakdown.

## ACCESSORIE OPTIONS

Mount Flange	MF-500	Stainless steel mounting flange
Mount Flange	MF-200	Plastic mounting flange
Protection Filter	FT-900	Stainless mesh filter for high humidity
Protection Filter	FT-800	Stainless sinterd filter for dryer

## LED DISPLAY & SWITCH FUNCTION



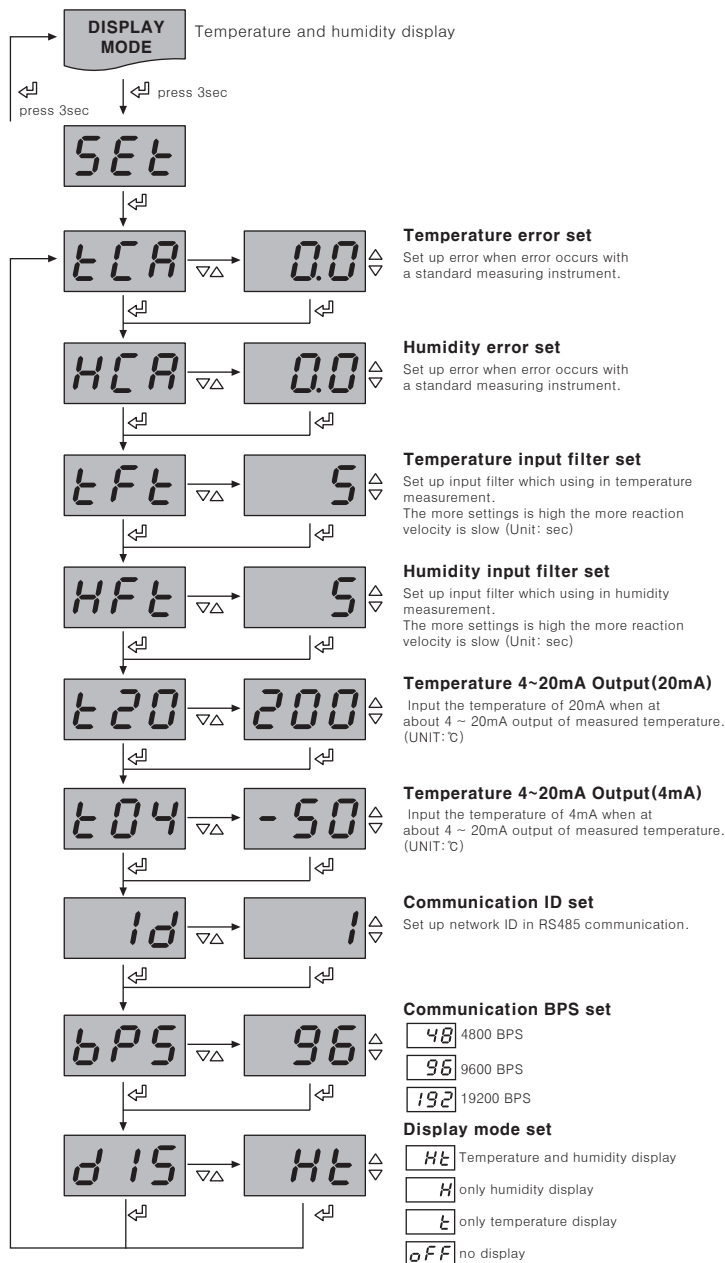
LED2	Green LED : Low speed flickering in operation High speed flickering in calibration mode
LED3	Red LED : Power Lamp
LED4	Green LED : Turn on it has receiving data in RS485 comm.
LED5	Red LED : Turn on it has sending data in RS485 comm.
°C	Turn on at display temperature
⚠	Turn on at alarm(sensor fault) sensing

▽ ▲	Menu movement increase or decrease setting	↶	Use at parameter change
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## Alarm message and management

Message	Fault	management method
tOP	Temperature sensor open fault	Temperature sensor replacing and recalibration.
tSh	Temperature sensor short fault	
HoP	Humidity sensor open fault	Humidity sensor replacing and recalibration.
HSh	Humidity sensor short fault	
tCE	Temperature calibration factor error	calbration data reset and recalibration.
HCE	Humidity calibration factor error	

## Basic parameter change mode



## Calibration parameter change mode

We arrange shipment after finishing all correction. So, we recommend that only use at replacing sensor and need precise correction. In general, please use error setting for temperature and humidity measurement of basic parameter

